UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/563,741	01/09/2006	Glenn Rolus Borgward	740123-483	4135

25570 7590 10/05/2010

ROBERTS MLOTKOWSKI SAFRAN & COLE, P.C.
Intellectual Property Department
P.O. Box 10064
MCLEAN, VA 22102-8064

EXAMINER	
WILLIS, RANDAL L	

ART UNIT	PAPER NUMBER
2629	

NOTIFICATION DATE	DELIVERY MODE
10/05/2010	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

lgallaugher@rmsclaw.com
dbeltran@rmsclaw.com
docketing@rmsclaw.com

Office Action Summary	Application No.	Applicant(s)	
	10/563,741	ROLUS BORGWARD, GLENN	
	Examiner	Art Unit	
	RANDAL WILLIS	2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *27 August 2010*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *96-118 and 120-134* is/are pending in the application.

4a) Of the above claim(s) *134* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *96-118 and 120-133* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☒ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This office action is in response to application 10/563,741 filed January 9th 2006. Claims 96-118 and 120-133 are currently pending and have been examined.

Response to Arguments

2. Applicant's arguments with respect to claims 96-118 and 120-133 have been considered but are moot in view of the new ground(s) of rejection.

Election/Restrictions

Newly submitted claim 134 directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: Claim 134 is directed to a digital computer with multiple detachable input module which contain user access information. Neither of these limitations were alluded to in the original invention as claimed, nor does claim 134 require the input module of the other claims, which can be accessed from front or rear surface.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claim 134 withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 96-102, 105-118, 120, 122-133 rejected under 35 U.S.C. 103(a) as being unpatentable over Mantysalo (2004/0263484) in view of Lee.

Apropos claim 96, Mantysalo teaches:

A digital computer (laptop [0002]) having at least one display (402, Fig. 5) for displaying information, exhibiting, comprising:

a) a housing having at least one front surface, facing a user viewing the display, side edge faces and a rear surface opposite to the front surface (Fig. 5a shows front facing of housing, 6a shows rear facing),

b) an input device having input means on at least one surface for at least one of inputting and manipulating information (404, Fig. 5a), the input device being an input module which is movable from a position accessible at the front face of the computer with respect to the housing to a position in an oppositely facing orientation that enables the inputting or manipulating of information at the rear surface of the digital computer housing instead of at the front surface of the computer housing (See figures 5a-6b showing input device 404 being accessed from front or rear of housing), and is electrically connected to the digital computer via at least one interface (Inherent in input module designed to communicate with housing display [0063]),

However, Mantysalo fails to explicitly teach:

said input device also being operable for inputting or manipulating of information in a decoupled state disengaged from the housing.

In the same field of input devices for laptop computers, Lee teaches having an input means of the laptop that is able to be disconnected and used in the disconnected state (abstract).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to include the ability to detach and continue to operate the input means as taught by Lee in the device of Mantysalo in order to allow the user to input data in the most comfortable position possible.

Apropos claim 97, Lee teaches:

The digital computer as claimed in claim 96, wherein the input module is usable as an external mouse device when it is mechanically decoupled from the digital computer (Col 6 lines 5-10).

Apropos claim 98 and 123, Mantysalo teaches:

The digital computer as claimed in claim 96, wherein the input module is constructed as at least one of a special module having

a joystick,

a chip card receiving module,

- an adapter card module for network connections and other system expansion modules,

- a module for receiving and/or transmitting satellite signals,

- a telecommunication module, a position finding module (GPS, Galileo),

a mobile radio telephone,

a PDA, a remote control,

a USB or FireWire interface module,

a display module with pin and/or key input (touchpad w/ virtual keyboard [0017]), -

a media player, and

- a laser pointer.

Apropos claim 99 and 124, Mantysalo teaches:

The digital computer as claimed in claim 96, wherein the at least one of inputting and manipulating of information by means of the input module comprises means for performing at least one of the functions from the following group of functions:

- inputting of relative location data for controlling a cursor on the display of the digital computer by a corresponding movement of a hand or of at least one finger of a hand of a user (pointer control [0017]),
- inserting of menus and selection information, paging, scrolling switching into another operating mode, setting up at least one of device and software characteristics,
- providing information on the display,
- selecting information on the display,
- at least one of selecting and marking information displayed on the display,
- moving information displayed on the display,
- confirming marked information or information input,
- inputting PIN or password information,
- switching the digital computer on and off,
- switching the screen on and off,
- activating and deactivating of a pen input mode, and
- activating and deactivating of an energy saving mode.

Apropos claim 100and 125, Mantysalo teaches:

The digital computer as claimed in claim 96, wherein the input module, as operating element, has at least one of

a slide pad,

a key,

a jog dial,

a rollerball,

a capacitive sensor,

a pressure-sensitive screen ([0012]),

a multifunction key,

a 4-WAY rocker key and other keys.

Apropos claim 101, Mantysalo teaches:

The digital computer as claimed in claim 96, wherein the digital computer has a coupling bay which receives the input module so that it can be reached from at least two sides (see Fig. 5a-6b, input module connected via 406 to be accessible from both front and rear).

Apropos claim 102, Mantysalo teaches:

The digital computer as claimed in claim 96, wherein at least one of the input module and the digital computer is configured by means of a relative movement of the input module which is movable with respect to the housing (See Fig. 1 changing of modes based on position of input module).

Apropos claim 105, Mantysalo teaches:

The digital computer as claimed in claim 102, wherein the input module is pivotable about a pivot axis which is located parallel to the input surface for producing the relative movement for configuring (See Fig. 5).

Apropos claim 106, Lee further teaches:

The digital computer as claimed in claim 96, wherein the input module has input means on at least two sides for operating thereof from at least two sides in the coupled state in the coupling bay (340, Fig. 5A on the top side, 350, Fig. 5C on the bottom side and connection 310 on the rear side,).

Apropos claim 107 and 126, Mantysalo teaches:

The digital computer as claimed in claim 96, wherein the digital computer and the input module have a plurality of input means which are operatable in combination for inputting (Fig. 7a).

Apropos claim 108 and 127, Mantysalo and Lee teaches:

The digital computer as claimed in claim 114, wherein the digital computer has a rear coupling bay on its rear surface (input device rotate to the back, Fig. 6a Mantysalo); wherein the input module is removable and insertable into the rear coupling bay (see argument in claims 96 and 114 for removability taught by Lee) and a second coupling

bay on the front surface (Fig. 4b Mantysalo), and is an operable as external mouse module in a mechanically decoupled state (Lee's abstract).

Apropos claim 109 and 128, Mantysalo teaches:

The digital computer as claimed in claim 96, wherein the operating mode of at least one of the input means and of the display are settable in dependence on at least one of the configuration of the input device and the device attitude or position (See Fig. 1 changing of modes based on position of input module).

Apropos claim 110 and 129, Lee teaches:

The digital computer as claimed in claim 96, wherein the input module has its own battery which, in the inserted state, is chargable via the mobile digital computer (Col 6 line 48-59).

Apropos claim 111 and 130, Lee teaches:

The digital computer as claimed in claim 96, wherein means for establishing an effective coupling between the digital computer and the input module for data transmission by at least one of a radio signal, an infrared signal and in wire-connected manner is provided (Col 6 line 39-44).

Apropos claim 112, and 131, Lee teaches:

The digital computer as claimed in claim 96, wherein at least one interface of the input module provides both for power supply and data traffic (Battery recharged when connected to the system Col 6 lines 53-56).

Apropos claim 113, Lee teaches:

The digital computer as claimed in claim 96, wherein the input module has means for switching, when mechanically decoupled, to a wireless data connection and remains effective as external input module (Fig. 13, shows switching between Wired and Wireless communication).

Apropos claim 114, Mantysalo teaches:

A digital computer having at least one display for displaying information, exhibiting, comprising:

a) a housing (400, Fig. 4a) having at least one front surface, facing a user viewing the display (402, Fig. 5a), side edge faces and a rear surface opposite to the front surface,

b) the input module being provided with at least one input means which may be operated on the rear surface (404, Fig. 6b).

c) wherein the digital computer has a coupling bay which receives the input module so that it can be reached from at least two surfaces (Fig. 5a and Fig. 6b show input module able to be reached from front or rear surface).

However, Mantysalo fails to explicitly teach:

wherein the digital computer is adapted to receive an input module detachably connected to the digital computer via at least one interface,

In the same field of input devices for laptop computers, Lee teaches having an input means of the laptop that is able to be disconnected and used in the disconnected state (abstract).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to include the ability to detach and continue to operate the input means as taught by Lee in the device of Mantysalo in order to allow the user to input data in the most comfortable position possible.

Apropos claim 115, Mantysalo teaches:

The digital computer as claimed in claim 114, wherein the input module may be turned with respect to the housing in a turning operation between a first position and a second position of two opposite positions such that input means being operable from the rear surface in said first position may be operated from the front surface after the input module having been turned to said second position (Fig. 5a and Fig. 6b show turning of input module between two facings).

Apropos claim 116, Lee and Mantysalo fail to explicitly teach:

The digital computer as claimed in claim 115, wherein turning operation of the input module from the first position to the second position or vice versa is executed outside the housing of the digital computer.

However, one of ordinary skill in the art at the time of the invention would have found it obvious that the combination of Mantysalo's input module that rotates around to be accessible from two different positions, and the ability to attach and detach an input module as taught by Lee would allow for the possibility to re-attach the input module into either position for ease of use of the user.

Apropos claim 117, Mantysalo teaches:

The digital computer as claimed in claim 115, wherein turning operation of the input module from the first position to the second position or vice versa is executed inside the housing of the digital computer (Fig. 5a-6b input module turned while coupled to housing).

Apropos claim 118, Lee further teaches:

The digital computer as claimed in claim 114, wherein the input module is usable as an external mouse device in a third position when it is mechanically decoupled from the digital computer (Col 6 lines 5-10).

Apropos claim 120, Mantysalo teaches:

The digital computer as claimed in claim 114 wherein the coupling bay is provided with the at least one interface for connecting the input module (Inherently has an interface to manage data between input module and display it is controlling).

Apropos claim 122, Mantysalo teaches:

The digital computer as claimed in claim 115, wherein at least one of the input module and the digital computer is configured by means of the turning operation (Fig. 1).

Apropos claim 132, Lee teaches:

The digital computer as claimed in claim 114, wherein the input module has means for switching, when mechanically decoupled, to a wireless data connection and remains effective as external input module (Col 6 lines 5-15).

Apropos claim 133, Mantysalo and Lee teaches:

The digital computer as claimed in claim 114, wherein at least one of the display and inputting means of the digital computer are blocked in an inoperative status when the input module is removed from the digital computer and brought into a certain distance apart from the digital computer (Inherent in wireless systems that at a certain distance the device will be out of range and thus be inoperable for inputting data to the device).

Claims 103 and 104 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mantysalo and Lee in view of Flemming.

Apropos claim 103, Mantysalo and Lee fails to explicitly teach:

The digital computer as claimed in claim 101 wherein, for performing the relative movement for configuring, the input module is removable from the coupling bay and selectively insertable into the coupling bay in each of positions which are rotated with respect to each other about a vertical or a horizontal axis.

In the same field of input modules selectively coupled and decoupled from a portable computer, Flemming teaches an input module which can be inserted in multiple positions (See Fig. 3).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to include a way in which to change the orientation of the inserted input module in order to create a change in the interface that is more comfortable to the user depending on the task.

Apropos claim 104, Flemming further teaches:

The digital computer as claimed in claim 103, wherein at least one of the coupling bay and at the input module is provided with at least one further interface for use with the changed orientation (See different interfaces for orientations in Fig. 4).

Claim 121 rejected under 35 U.S.C. 103(a) as being unpatentable over Mantysalo and Lee in view of Nohr (2004/0196265).

Apropos claim 121, Mantysalo and Lee fail to explicitly teach:

wherein the coupling bay is provided with at least one additional interface for connecting further additional equipment with the digital computer rather than the input module.

In the same field of portable display devices with movable/removable input means, Nohr teaches having multiple keypad/control units which can attach to the same portable display housing [0064].

Therefor it would have been obvious to one of ordinary skill in the art at the time of the invention to allow additional control units to be connected to the portable device as taught by Nohr on the portable display device of Mantysalo in order to allow the user to change the keypad/control configuration to suit different preferences and/or applications [0064].

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to RANDAL WILLIS whose telephone number is (571)270-1461. The examiner can normally be reached on Monday to Thursday, 8am to 5pm (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amr Awad can be reached on 571-272-7764. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

RLW

/Amr Awad/
Supervisory Patent Examiner, Art Unit 2629